U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2010-0218-EA

CASEFILE/PROJECT NUMBER: COC24276D (Pipeline ROW)
COC74816 (Temporary Use Area)

PROJECT NAME: Pipeline Maintenance and TUA

LEGAL DESCRIPTION: Sixth Principal Meridian,
T. 3 S., R. 100 W.,
sec. 17, SE¼SW¼.

APPLICANT: Encana Oil & Gas (USA) Inc.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: Right-of-way grant COC24276D was issued October 21, 1977 and renewed on May 24, 2006.

Proposed Action: Encana Oil & Gas (USA) Inc. (hereafter Encana) needs to conduct maintenance on its East Douglas Creek pipeline. Encana requests authorization to conduct maintenance on the pipeline where East Douglas Creek has eroded its channel and exposed the pipeline. Approximately six feet of the 6-inch pipeline is exposed along the stream bank where erosion has caused the bank to collapse. This exposed pipeline must be buried again for safety and environmental concerns and to prevent further erosion and possibly rupturing in the future.

Encana is proposing to enter the area along its existing 20 ft wide right-of-way (ROW) where it crosses County Road (CR) 28 heading southeast to the point where the pipe is exposed. In addition to the authorized 20 ft ROW, Encana will need an additional 50 ft wide by 200 ft long section of temporary use area (TUA) on the west side of the ROW extending to the northwest toward CR 28. To prevent further erosion from exposing the pipe, Encana proposes to place large rocks to armor the creek bank. The rocks would be placed, with no additional excavation, and then backfilled up to the present ground disturbance. As discussed with the Encana representative, rock would be large enough to not move in flood events, although given the right event, there is no guarantee of success. Rock would be boulder- size, 12 inches to 36 inches in

diameter, and would be placed with an excavator that has a thumb (or similar equipment). The rock would be placed in such a way that it would be interlocking and stable. Any sections of the fill that may receive concentrated overland flow would be armored with angular rock, four to six inches in diameter, to keep the fill from being compromised. No equipment will enter the stream channel and all equipment work will be conducted from above the channel.

Encana has contacted Olsson Associates who have discussed the project with the US Army Corps of Engineers (USACE). The USACE has indicated that if the area is cleared for cultural resources and since Encana would not be impacting the ordinary flow, then Encana would need to provide them with notification when the work is to begin and provide post construction documents and photos.

In conjunction with the pipeline repair, Encana has agreed to construct a rock barrier to prevent unauthorized vehicle travel across East Douglas Creek. The barrier would consist of a single ±60 ft line of large rock embedded along the edge of the first terrace above the active floodplain, approximately 90 ft east of the pipeline repair site. The rock would extend perpendicular across the unauthorized vehicle track and is intended to elevate and harden the channel's west incise bank to prevent vehicle use of the channel crossing and deter periodic compromise of associated channel features and riparian vegetation. This feature would also help provide physical and vegetation-derived reinforcement of an outside meander bend, helping to resist lateral channel migration and the development of a cutoff channel across the narrow base of a channel meander (the opposing downstream point of channel repair).

No Action Alternative: The No Action Alternative would involve denying the application, and the exposed pipeline repair would not take place.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: Encana originally proposed to install two gabion baskets. The baskets would have been 16 ft long by 12 ft wide by 8 ft tall. They would have been installed by placing two rows of baskets in the bottom of the channel against the bank. These baskets would have been filled with 4-inch to 6-inch washed cobble rock. Topsoil would have been stripped from the existing ROW and subsoil used to cover the exposed pipe by building the bank back up behind the gabion baskets. The gabion baskets would not have been placed in the ordinary water channel. They would have been placed in the area where water flows only during spring runoff and possibly during flash flooding events.

Encana amended their Proposed Action from installation of gabion baskets to using large rocks to prevent further erosion and stabilization of the creek bank. Large rock can adjust with the channel as necessary and does not need the support of wire baskets that have a limited lifespan. Thus, the current proposal should be less intrusive and should not need additional maintenance.

PURPOSE & NEED FOR THE ACTION: The purpose of the Proposed Action is to repair a pipeline that is in danger of rupturing due to active erosion. The need for the action is that erosion associated with natural channel movement of East Douglas Creek has exposed six feet of a buried natural gas pipeline. The BLM will decide whether to approve the temporary use area and associated maintenance activities, and if so, under what conditions.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-49

Decision Language: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST

DETERMINATION OF STAFF:		
Determination	**Resource**	**Rationale for Determination***
Natural, Biological and Cultural Resources		
NI	Air Quality	Emissions of dust and exhaust fumes from construction equipment will occur for the less than one week during installation of the large rocks and reclamation activities. This is within what can be expected from casual uses of public lands.
PI	Soils	See impacts described below.
PI	Wastes (hazardous or solid)	There is potential for the hydrocarbon product to be released if the pipeline is damaged.
PI	Water Quality (Surface/Ground	See impacts described below.
PI	Wetlands/Riparian Zones	See impacts described below.
PI	Vegetation	See impacts described below.

DETERMINATION OF STAFF:		
Determination	**Resource**	**Rationale for Determination***
PI	Invasive, Non-native Species	See impacts described below.
NP	Threatened, Endangered, and Sensitive Plant Species	The project area does not contain any special status plant species and there will be no impact to special status plants as a result of the Proposed Action.
PI	Threatened, Endangered, and Sensitive Animal Species	See impacts described below.
NI	Migratory Birds	Project is scheduled for fall of 2011 and would avoid involvement of any migratory bird nesting activity. If the project is delayed until 2012 breeding season, ~ 0.25 acre of nesting habitat on the alluvial terrace would be cleared and <3 acres subjected to potential disruption. Terrace habitats involve greasewood/basin big sagebrush shrubland with an understory dominated by invasive annuals located within 20-45 meters of an all-weather county road. Common shrubland associates include: lark, Brewer's (abundant and widely distributed BLM-sensitive species), and vesper sparrows, spotted towhee, and western meadowlark. The narrow willow-dominated margins of East Douglas Creek potentially influenced comprise about 0.1 acre and support more generalized riparian associates, such as song sparrow, yellow warbler, and lazuli bunting. In the worst case, ≤4 nesting attempts would be subject to adverse levels of disturbance.
PI	Wildlife, Aquatic	See impacts described below.
NI	Wildlife, Terrestrial	General deer and elk winter range is located at the intersection of RBC 27 and 28. The project is located adjacent to and within 20-45 meters of an improved all-weather county road. The Proposed Action would have little influence on big game due to the short duration of work, proximity of existing roads, and generalized winter use of the project site.
NP	Wild Horses	The Proposed Action is not located within a designated wild horse management area. The Proposed Action would have no impacts on the wild horse management area.
NP	Cultural Resources	No resources present Darnell 2011 (compliance dated 3/30/2011).
NP	Paleontology	The project is located in quaternary alluvial fill which does not normally produce fossils in Rio Blanco County (Armstrong and Wolny 1989).

NP = not present in the area impacted by the proposed or alternative actions
NI = present, but not affected to a degree that detailed analysis is required
PI = present with potential for impact analyzed in detail in the EA

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

SOILS

Affected Environment: Soil disturbance will include excavating and moving the fill to be placed behind the large rock and preparation of disturbed areas for seeding and reclamation efforts. All of the proposed efforts are designed to improve long-term (more than one year)

stability of the soils on the site. The soils in this area are alluvium along East Douglas Creek, which is incised along this reach and actively cutting the outside meander bends, hence the need for the project to protect the buried pipeline.

Environmental Consequences of the Proposed Action: Placing the large rock will require heavy equipment to be used to move the rocks into place; this will result in compaction of the soils where the tracks or tires of the vehicles need to travel. Excavating the fill and placing it behind the placed large rocks will disturb the borrow area used to provide the material and will result in mixing soils of different horizons, some compaction, and result in disturbed areas that will need reclamation efforts. The reclamation planned in the Proposed Action should successfully stabilize the site with vegetation (slopes in these areas will not be steep), and the rock armoring will stabilize soils in the steep drop down to the channel.

If construction were to occur when soils are saturated or during high water in Douglas Creek, the impacts would be more pronounced, due to greater soil disturbance that occurs with vehicles in muddy conditions; therefore construction activities should cease when soil moisture conditions are not favorable to construction activities.

Environmental Consequences of the No Action Alternative: No direct impacts to soils would occur. Erosion along Douglas Creek would continue. If the pipeline were to rupture due to the exposure in this area there may be impacts to the soils from light hydrocarbons and water (condensate) that may be present in natural gas pipelines.

Mitigation: All construction activity shall cease when soils or road surfaces become saturated to a depth of three inches, unless there are safety concerns or activities that are approved by the authorized officer.

Finding on the Public Land Health Standard for upland soils: With mitigation this action is unlikely to reduce the productivity of soils on public lands.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored, or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: The potential for harm to the environment is presented by risks associated with spills of fuel, oil, and/or hazardous substances during oil and gas operations. Accidents and mechanical breakdown of machinery are also possible.

Environmental Consequences of the No Action Alternative: If the erosion issue continues and the pipeline ruptures, there is the potential for harm to the environment associated with spills of hazardous substances.

Mitigation: 1. The right-of-way holder shall comply with all federal, state and/or local laws, rules, and regulations addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.

2. The holder shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing emissions, fresh water use, and hazardous material utilization, production, and releases.

3. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the Bureau of Land Management's White River Field Office.

4. Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

5. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the Bureau of Land Management's White River Field Office at (970) 878-3800.

6. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the Bureau of Land Management's White River Field Office may take measures to clean-up and test air, water (surface and/or ground), and soils at the lessee/operator's expense. Such action will not relieve the holder of any liability or responsibility.

7. With the acceptance of this authorization, the commencement of development under this authorization, or the running of thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the holder, and through the holder, its agents, employees, subcontractors, successors and assigns, stipulates and agrees to indemnify, defend and hold harmless the United States Government, its agencies, and employees from all liability associated with the emission or release of substances that pose a risk of harm to human health or the environment.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Public Land Health Standard 5)

Affected Environment: The Proposed Action is to place large rock within actively eroding outside meander bends within the East Douglas Creek drainage along County Road 27. Table 1 describes water segments that may be impacted by this project.

Table 1. Water Quality Classification Table*

Seg.	Segment Name	Use Protected	Protected Beneficial Uses			
			Aquatic Life	Recreation	Agriculture	Water Supply
23	The mainstems of East and West Douglas Creeks	No	Cold 1	Existing Primary Contact Recreation	Yes	Yes

***** Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 37 Classifications and Numeric Standards For Lower Colorado River Basin, Effective June 30, 2010

East Douglas Creek is in White River Segment 23 and is protected for cold water aquatic life (Cold 1). The cold water designation is protective of aquatic life, including trout, normally found in waters where the summer weekly average temperature does not frequently exceed 20 ºC. Cold waters typically have high numerical standards and are applied where the physical habitat, water flows, and water quality conditions exist. These segments also have standards that are protective of recreation, agriculture, and water supply.

Environmental Consequences of the Proposed Action: The Proposed Action will authorize the placement of large rock on outside meander bends of East Douglas Creek in order to stabilize the site from future erosion. Potential direct impacts would include surface soil compaction caused by construction activities and a reduction in the active flood plain along these outside meander bends. Since all construction activities will occur outside of the active stream channel, no direct impacts to the water quality of East Douglas Creek are expected. The construction equipment will need to work in the bed of Douglas Creek and along the first terrace to place rock and travel across to access the two construction locations. This could cause temporary instability of streambanks and damage of vegetation. Since this area is in an active floodplain, construction would occur during dry conditions and would be minimized as much as possible; therefore, impacts are not expected beyond one year.

Environmental Consequences of the No Action Alternative: No impacts identified.

Mitigation: None.

Finding on the Public Land Health Standard for water quality: It is unlikely that construction or maintenance of the pipeline repair would result in an exceedence of state water quality standards.

WETLANDS AND RIPARIAN ZONES (includes a finding on Public Land Health Standard 2)

Affected Environment: The proposed project is located on the perennial and willow-dominated East Douglas Creek. This and downstream reaches of East Douglas and the subtending mainstem Douglas Creek are generally in proper functioning condition. There are no active beaver workings in the project vicinity. Pipeline exposure was caused by the undercutting of a vertical incise wall at an outside meander bend, and consequently there is little functional floodplain development or substrate suited for riparian vegetation at the immediate project site.

Environmental Consequences of the Proposed Action: The Proposed Action is intended to stabilize and harden an outside meander bank without physical involvement of the bank-full channel. This project would arrest continued bank sloughing at this site and periodic pulses of sediment into East Douglas Creek as a potential contributor to lateral channel instability in downstream reaches (especially premature and accelerated sediment accumulation in beaver ponds). In the context of the Douglas Creek watershed, incremental reductions in sediment yields attributable to this project would be indiscernible and discountable. Similar to the existing situation, this short channel reach is likely to remain impinged on the outside bank and, although perhaps eventually becoming colonized by coyote willow, would probably allow little natural floodplain development on that bank. This effect would be confined to the project site and would have no effective influence on reach function or condition.

Installation of the ROW barrier is intended to deter further vehicle use of the pipeline corridor and crossing of the East Douglas Creek channel. In this system, the development and stability of channel structure is derived largely from woody and obligate herbaceous riparian vegetation. Vehicle use of this crossing appears infrequent, but establishes a latent point of channel instability by impeding vegetation establishment on channel banks and compromising the continuity and maturation of erosion-resistant root masses (i.e., willow, sedge/rush) in the channel's flood-prone area.

Enhancing channel stability at this point may also help slow lateral channel migration and reduce the risk of the channel eventually cutting through the base of the meander (about 60 ft). If the channel where to cutoff the meander, resulting meander cutoff would bypass about 470 ft of channel and abruptly increase the channel's gradient. This event would initiate a series of channel adjustments (e.g., channel downcutting, bank sloughing) that would release considerable quantities of sediment into the system in the short term, jeopardize current pipeline repair efforts, and increase the likelihood of further pipeline exposure and riparian involvement to the south.

Environmental Consequences of the No Action Alternative: Left untended in the short term, sediments originating from this site would, at least periodically, contribute to minor and localized reductions in the quality, availability, or development trend of downstream and possibly upstream aquatic and riparian habitats. Considering the potential scale of these inputs, these episodes would likely represent fluctuations within the average range of variability that would have indiscernible and discountable influence on aquatic or riparian habitats associated with downstream portions of East and mainstem Douglas Creek, much less the White River. In the longer term, hardening the bank at these two points would reduce the risk of channel

movements that may prompt further episodes of bank degradation and pipeline repair (see discussion in Consequences of the Proposed Action).

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: Downstream aquatic and riparian habitats in lower East Douglas and mainstem Douglas Creeks and the White River, considering their respective potential, meet the Land Health Standards. Although rehabilitation efforts on the existing pipeline corridor are expected to aid in longer-term channel stability, neither alternative would be expected to exert marked short or long term influences on downstream aquatic or riparian habitat conditions or function in Douglas Creek or the White River. On a localized basis, the Proposed Action is expected to enhance system stability and further the intent of the Land Health Standard in the long term. In the short term, the No Action Alternative would not be expected to contribute measurably to system deterioration and would not detract from continued meeting of the Land Health Standard. In the longer term, and in the absence of proactive ROW maintenance, the risk of localized channel and bank degradation associated with the pipeline would persist and would represent management that is not consistent with the intent of the Land Health Standards.

VEGETATION (includes a finding on Public Land Health Standard 3)

Affected Environment: The Proposed Action is located within a foothill swale ecological site which is dominated by low shrubs and grasses. The potential plant community for this site mainly consists of basin wildrye, western wheatgrass, streambank wheatgrass, bluegrasses, and big sagebrush. Smaller amounts of rubber rabbitbrush, fourwing saltbush, and bottlebrush squirreltail are also present in the potential plant community. Cheatgrass (*Bromus tectorum*) is an undesirable, invasive, and alien plant species that is present within the locality of the Proposed Action.

Environmental Consequences of the Proposed Action: The Proposed Action would disturb a mid to low seral class of shrub community for a total of 0.2 acres. The short-term soil and vegetation disturbances would be offset in the long-term by reclaiming the disturbed area with a seed mix that is suited for this ecological site. As this area has a component of cheatgrass and halogeton within the plant community, successful revegetation efforts would slightly increase desirable plant species within the rangelands.

Environmental Consequences of the No Action Alternative: No new earthen disturbance would take place and impacts to the vegetative community from disturbance by vehicles would not occur. This would also eliminate the possibility of improvements to the vegetative structure through successful reclamation.

Mitigation: 1. The seed mix listed below is recommended to seed the temporary use area, access route, and other disturbed areas. Please note the application rates are shown in pounds of live seed (PLS/acre) and are the drill seeding rates. Broadcast application must be doubled and

seeds should be harrowed into the soil. If the holder chooses an alternate seed mix, then the alternate seed mix should be submitted to the BLM WRFO for approval.

Variety	Common Name	Scientific Name	Rate (lbs PLS/acre
Magnar	Basin Wildrye	*Leymus cinereus*	3.5
Rosana	Western Wheatgrass	*Pascopyrum smithii*	3.5
San Luis	Slender Wheatgrass	*Elymus trachycaulus*	3
Sodar	Streambank Wheatgrass	*Elymus lanceolatus*	3
Timp	Northern Sweetvetch	*Hedysarum boreale*	3
Maple Grove	Lewis Flax	*Linum lewisii*	1

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Early seral ecological sites on approximately half of the area associated with the Proposed Action lack desirable plant species at an appreciable density and frequency level, thus are not meeting standards. This is due to the prevalence of cheatgrass and halogeton within the vegetative understory. A slight positive benefit would be received through a successful revegetation effort, thus increasing preferred plant species within this low producing rangeland. Mid and late seral ecological sites at the Proposed Action locality have acceptable components within the plant community and are meeting standards.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The project site would create new earthen disturbance on 0.2 acre along the East Douglas Creek drainage. Currently houndstongue (*Cynoglossum officinale*), Canada thistle (*Cirsium arvense*), halogeton (*Halogeton glomeratus*), and cheatgrass (*Bromus tectorum*) occur within the project area. Houndstongue and Canada thistle are list B noxious weeds on the State of Colorado noxious weed list. Halogeton and cheatgrass are list C species on the State of Colorado noxious weed list.

Environmental Consequences of the Proposed Action: The earthen disturbance created by the Proposed Action has the potential to create a pathway for new or increased invasion by noxious weeds onto the site. Equipment used for the project also has the potential to bring new weed seeds onto the site from previous projects.

All of the disturbance created would be short-term disturbance associated with the pipeline repair and barrier construction to mitigate vehicle travel along the right-of-way. Prompt revegetation of the site with an approved seed mix adapted to the site would aid in minimizing the establishment of weeds on the site. Continued monitoring and treatment for the life of the right-of-way would also help minimize weed establishment on the site and movement to adjacent plant communities.

Environmental Consequences of the No Action Alternative: The No Action Alternative would result in no new ground disturbance and would reduce the likelihood of new weed species becoming established on the site. New weeds could be brought onto the site through the

continued use of the right-of-way as a road. The applicant would still be responsible for managing weeds on the site as part of the approval for the original right-of-way.

Mitigation: 1. The applicant will be responsible for the treatment of cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the Proposed Action.

2. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and pesticide use proposals (PUP's) must be approved by the BLM.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Public Land Health Standard 4)

Affected Environment: The project site involves the sediment-rich Douglas Creek system about 25 valley miles upstream of the White River and its associated critical habitat for the endangered Colorado pikeminnow. A number of BLM-sensitive fish also inhabit the lower White River, including flannelmouth, bluehead, mountain suckers, and roundtail chub.

The East Douglas Creek system above Cathedral Creek is inhabited by the abundant and widely distributed speckled dace and the BLM-sensitive Colorado River cutthroat trout, although these lower reaches are thought to be only sporadically and temporarily occupied by trout. BLM-sensitive northern leopard frogs are uncommon and sporadically distributed along East and downstream portions of mainstem Douglas Creek.

Environmental Consequences of the Proposed Action: This project would arrest continued bank sloughing at this site and periodic pulses of sediment into East Douglas Creek as a potential contributor to lateral channel instability in downstream reaches (especially premature and accelerated sediment accumulation in beaver ponds). In the context of the Douglas Creek watershed, incremental reductions in sediment yields attributable to this project, and the subsequent influence on aquatic habitat for special status fish, especially those in the lower White River, would be indiscernible and discountable.

The project site, in its current state, offers little emergent vegetation as potential floodplain habitat for northern leopard frog. The proposed project would maintain such conditions at the immediate project site (see *Wetland/Riparian* section). Although the project would be expected to stabilize this short reach of stream bank, benefits derived from incremental reductions of sediment delivered downstream would likely be discountable at the reach or system level.

Installation of the ROW barrier and pipeline rehabilitation are intended to deter further vehicle use of the pipeline corridor and crossing of the East Douglas Creek channel. In this system, the development and stability of channel structure important as fish habitat (e.g., undercut banks, non-entrenched floodplains) is derived largely from woody and obligate herbaceous riparian vegetation. Promoting vegetation-derived armoring of this outside meander bend (see discussion in *Wetland/Riparian* section) would be expected to contribute to longer-term channel stability in

this reach and allow for the development of channel features better suited to the support of native trout and amphibians.

Environmental Consequences of the No Action Alternative: Left untended, sediments originating at this site would, at least periodically, contribute to minor and localized reductions in the quality, availability, or development trend of downstream aquatic and riparian habitats. Considering the potential scale of these inputs, these episodes would likely represent fluctuations within the average range of variability that would have no substantive influence on aquatic or riparian habitats associated with the Douglas Creek system or the White River.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: Downstream aquatic and riparian habitats in lower East Douglas and mainstem Douglas Creeks and the White River, considering their respective potential, meet the Land Health Standards. Although rehabilitation efforts on the existing pipeline corridor and stream crossing are expected to aid in localized development of channel structure important in the support of native trout, neither alternative would be expected to exert marked short or long term influences on downstream aquatic or riparian habitat conditions or function in Douglas Creek or the White River. On a localized basis, the Proposed Action is expected to elevate measures important in meeting the Land Health Standards, whereas the No Action Alternative would not detract from continued meeting of the Land Health Standards at current levels.

WILDLIFE, AQUATIC (includes a finding on Public Land Health Standard 3)

Affected Environment: See *Threatened, Endangered, and Sensitive Animal* section above.

Environmental Consequences of the Proposed Action: Same as *Threatened, Endangered, and Sensitive Animal* section above.

Environmental Consequences of the No Action Alternative: Same as *Threatened, Endangered, and Sensitive Animal* section above.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Same as *Threatened, Endangered, and Sensitive Animal* section above.

ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains or prime and unique farmlands exist within the area affected by the Proposed Action. There are also no Native American religious or environmental justice concerns associated with the Proposed Action.

OTHER ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Other Elements	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Visual Resources			X
Fire Management	X		
Forest Management	X		
Hydrology/Water Rights		X	
Rangeland Management		X	
Realty Authorizations			X
Recreation		X	
Access and Transportation			X
Geology and Minerals	X		
Areas of Environmental Concern			X
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics	X		
Law Enforcement	X		

VISUAL RESOURCES

Affected Environment: The Proposed Action is located at the confluences of East Douglas Creek and Cathedral Creek along Rio Blanco County (RBC) roads 27 and 28. At the intersection there are a few structures that are related to oil and gas activities but the overall view is dominated by the natural vegetation and topography of the surrounding area. This area is within a Visual Resource Management (VRM) II classification. The objective of the VRM II class is to retain the existing character of the landscape. Management activities may be visible but should not attract attention.

Environmental Consequences of the Proposed Action: The Proposed Action will occur at the intersection of two county roads, RBC 27 and RBC 28. The public traveling through the area will predominantly be the private land owners within the area and public land hunters during big game hunting seasons. The impacts from the Proposed Action on visual resources will be greatest during the construction phase of the project. The contrast of the newly disturbed dirt

along with the equipment color and construction activity will draw the attention of the public towards the site. Post construction, the public traveling through the area will notice evidence of travel along the pipeline route and the contrasting dirt along the edge of the construction site. The contrasts between the exposed dirt and the surrounding vegetation may be mitigated by revegetating the site through seeding efforts. Through the successful revegetation and reclamation of the site, the level of change on the landscape will be low and the VRM class II objective would be retained. A beneficial impact of the Proposed Action would be rehabilitating the area so that the pipeline and bank erosion are no longer exposed, thus reducing the appearance of industrial impact to a VRM Class II area.

Environmental Consequences of the No Action Alternative: There would be no disturbance to the site attracting attention from the public traveling the adjacent county roads. However not rehabilitating the bank erosion and re-burying the pipeline would maintain the appearance of industrial development in a VRM Class II area.

Mitigation: See *Vegetation section* regarding seeding the disturbance.

ACCESS AND TRANSPORTATION

Affected Environment: Main access to the site is RBC 27, the East Douglas Creek road. The Proposed Action is located within the East Douglas Creek/Soldier Creek Area of Critical Environmental Concern (ACEC). Travel within this ACEC is designated routes and trail only.

Environmental Consequences of the Proposed Action: Truck traffic for hauling equipment and supplies for the project and the support vehicles will traverse the access to the Proposed Action. The access to the proposed site is along the existing pipeline ROW. The type and amount of traffic expected to utilize this access will impact vegetation and compact the soils, effectively creating a two track that may or may not recover from the activity. Without the successful revegetation of the site, the public may see the two track route and attempt to use it.

However, as described in the Proposed Action, the proponent, in conjunction with the emergency pipeline repair, agreed to voluntarily assist WRFO in establishing a tamper-resistant barrier to continued vehicle travel along an existing portion of pipeline ROW and a redundant unimproved crossing of East Douglas Creek. The barrier would serve to interrupt vehicle use of ROW and the channel crossing and deter periodic compromise of associated channel features and riparian vegetation.

Environmental Consequences of the No Action Alternative: Under this alternative no construction would occur, thus eliminating the possibility of construction related impacts occurring on the two-track ROW. However without the establishment of the barrier, it is likely that unauthorized use along the ROW would continue, thus resulting in increasing environmental impacts.

Mitigation: None.

REALTY AUTHORIZATIONS

Affected Environment: Existing ROWs include: natural gas pipelines authorized to ETC Canyon Pipeline LLC, a power line authorized to Moon Lake Electric Association, and telephone lines authorized to CenturyTel of Eagle and Jayne Peach.

Environmental Consequences of the Proposed Action: A temporary use permit (TUP) will be issued for the work area needed for the pipeline repair. The TUP will be 50 feet wide by 200 feet long and contain approximately 0.23 acres. In order to avoid impacts to existing facilities, Encana will need to notify ROW holders prior to construction.

Environmental Consequences of the No Action Alternative: The pipeline would continue to be exposed.

Mitigation: 1. To avoid impacts to existing ROWs, Encana shall notify ETC Canyon Pipeline LLC, Moon Lake Electric Association, CenturyTel of Eagle, and Jayne Peach prior to construction.

2. All activities shall comply with all applicable local, state, and federal laws, statutes, regulations, standards, and implementation plans. This includes acquiring all required state and/or local permits and implementing all applicable mitigation measures required by each permit.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: The Proposed Action is within the East Douglas Creek/Soldier Creek Area of Critical Environmental Concern (ACEC). This ACEC was designated to protect biologically diverse plant communities, riparian habitat, and Colorado River cutthroat trout habitat. No special status plants are known to inhabit the proposed project area.

Environmental Consequences of the Proposed Action: The Proposed Action complements aquatic and riparian management goals established for the East Douglas ACEC by remaining compatible with or complementing Colorado River cutthroat trout fishery values. See *Wetlands/Riparian* section for consequences of the Proposed Action on riparian habitats within the East Douglas Creek/Soldier Creek ACEC and the *Threatened, Endangered and Sensitive Animal Species* sections for consequences of the Proposed Action on aquatic and special status wildlife species. There are no special status plant concerns associated with the Proposed Action.

Environmental Consequences of the No Action Alternative: The No Action Alternative would not offer any intention of enhancing the stability of local channel features as native trout habitat. Assuming pipeline integrity would be gained by alternate means, future episodes of channel adjustment in the East Douglas Creek channel would likely represent fluctuations within the average range of variability that would not adversely influence long-term support of ACEC values.

Mitigation: Mitigation measures for riparian habitats and aquatic wildlife have been incorporated into the appropriate sections of this document.

CUMULATIVE IMPROPOSED ACTIONCTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of oil and gas activities are addressed in the 1996 White River Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement Environmental Impact Statement (EIS) for each resource value that would be affected by the pipeline repair.

REFERENCES CITED:

Armstrong, Harley J., and David G. Wolny
1989 Paleontological Resources of Northwest Colorado: A Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.

Darnell, Nicole
2011 Class III Cultural Resources inventory for the Proposed East Douglas Creek Pipeline Repair Project in Rio Blanco County, Colorado for EnCana Oi8l and Gas (USA) inc. Grand River Institute, Grand Junction, Colorado. #11-11-05

PERSONS / AGENCIES CONSULTED: State Historic Preservation Office and Rio Blanco County

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality, Water Quality, Surface and Ground Hydrology and Water Rights, Soils	6/01/2011
Jill Schulte	Botanist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species	7/10/2010
Michael Selle	Archeologist	Cultural Resources, Paleontological Resources	3/30/2011
Matthew Dupire	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation , Rangeland Management	5/25/2011
Ed Hollowed	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife, Wetlands and Riparian Zones	9/9/2010
Christina Barlow	Natural Resource Specialist/HazMat Coordinator	Wastes, Hazardous or Solid	11/18/2010
Jim Michels	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation	9/24/2010

Name	Title	Area of Responsibility	Date Signed
Jim Michels	Forester/ Fire / Fuels Technician	Fire Management, Forest Management	9/24/2010
Paul Daggett	Mining Engineer	Geology and Minerals	9/8/2010
Stacey Burke	Realty Specialist	Realty Authorizations	5/17/2011
Jim Michels	Natural Resource Specialist / Outdoor Recreation Planner	Visual Resources	9/24/2010
Melissa J. Kindall	Range Technician	Wild Horses	5/11/2011

Finding of No Significant Impact/Decision Record (FONSI/DR)

DOI-BLM-CO-110-2010-0218-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analysis of the environmental effects of the Proposed Action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the Proposed Action.

DECISION/RATIONALE: It is my decision to approve the pipeline repair work and construction of the barrier to vehicular travel in the pipeline ROW as described in the Proposed Action.

MITIGATION MEASURES:

1. All construction activity shall cease when soils or road surfaces become saturated to a depth of three inches, unless there are safety concerns or activities that are approved by the authorized officer.

2. The right-of-way holder shall comply with all federal, state and/or local laws, rules, and regulations addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.

3. The holder shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing emissions, fresh water use, and hazardous material utilization, production, and releases.

4. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the Bureau of Land Management's White River Field Office.

5. Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

6. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will report all emissions or releases that may pose a risk of harm to human health or the environment,

regardless of a substance's status as exempt or nonexempt and regardless of fault, to the Bureau of Land Management's White River Field Office at (970) 878-3800.

7. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the holder fails, refuses, or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the Bureau of Land Management's White River Field Office may take measures to clean-up and test air, water (surface and/or ground), and soils at the lessee/operator's expense. Such action will not relieve the holder of any liability or responsibility.

8. With the acceptance of this authorization, the commencement of development under this authorization, or the running of thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the holder, and through the holder, its agents, employees, subcontractors, successors and assigns, stipulates and agrees to indemnify, defend and hold harmless the United States Government, its agencies, and employees from all liability associated with the emission or release of substances that pose a risk of harm to human health or the environment.

9. The seed mix listed below is recommended to seed the temporary use area, access route, and disturbed areas. Please note the application rates are shown in pounds of live seed per acre (PLS/acre) and are the drill seeding rates. Broadcast application must be doubled and seeds should be harrowed into the soil. If the holder chooses an alternate seed mix, then the alternate seed mix should be submitted to the BLM WRFO for approval.

Variety	Common Name	Scientific Name	Rate (lbs PLS/acre
Magnar	Basin Wildrye	*Leymus cinereus*	3.5
Rosana	Western Wheatgrass	*Pascopyrum smithii*	3.5
San Luis	Slender Wheatgrass	*Elymus trachycaulus*	3
Sodar	Streambank Wheatgrass	*Elymus lanceolatus*	3
Timp	Northern Sweetvetch	*Hedysarum boreale*	3
Maple Grove	Lewis Flax	*Linum lewisii*	1

10. The applicant will be responsible for the treatment of cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the Proposed Action.

11. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and pesticide use proposals (PUP's) must be approved by the BLM.

12. To avoid impacts to existing ROWs, Encana shall notify ETC Canyon Pipeline LLC, Moon Lake Electric Association, CenturyTel of Eagle, and Jayne Peach prior to construction.

13. All activities shall comply with all applicable local, state, and federal laws, statutes, regulations, standards, and implementation plans. This includes acquiring all required state and/or local permits and implementing all applicable mitigation measures required by each permit.

COMPLIANCE/MONITORING: On-going compliance inspections and monitoring of construction activities will be conducted by White River Field Office staff. Specific mitigation developed in the associated Environmental Assessment will be followed. The holder will be notified of compliance related issues, and depending on the nature of the issue(s), will be provided 30 days to resolve such issues.

NAME OF PREPARER: Stacey Burke

NAME OF ENVIRONMENTAL COORDINATOR: Heather Sauls

SIGNATURE OF AUTHORIZED OFFICIAL: Kent P. Walter

Field Manager

DATE SIGNED: 01/20/12

ATTACHMENTS: Exhibit A – Map of Proposed Action

Encana Pipeline Repair and TUA
T3S, R100W, sec. 17

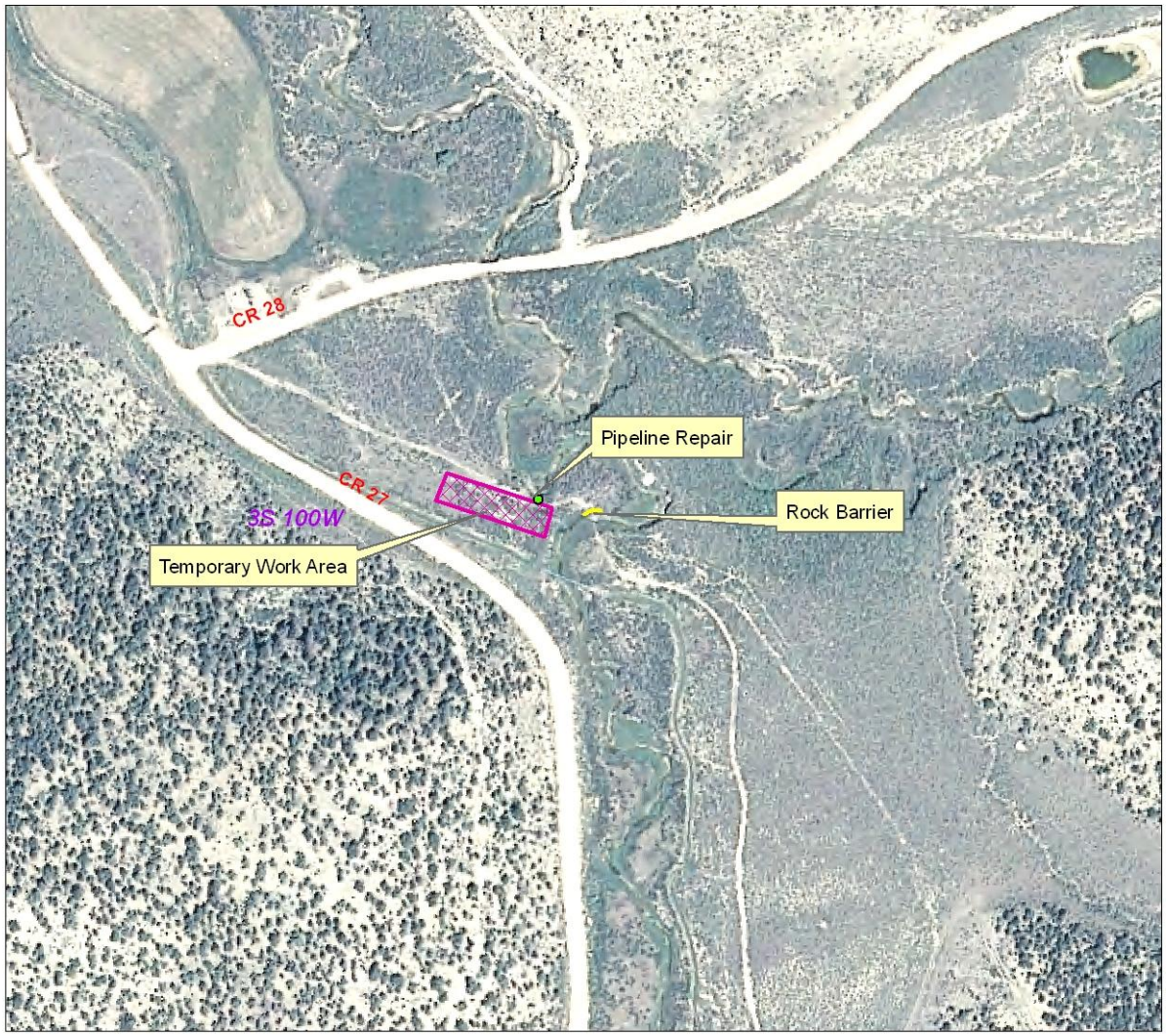

EXHIBIT A

COC24276 Dpipeline repair
COC74816 temporary use area
State
County
BLM
USFS
NPS
Other
BLM
CDW
County
FOR
NPS
PRI
STA
PLSS_Townships_GCDB2008

N

0 85 170 340 510 Feet

Sources:
BLM, USGS, CDOW, etc.

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August 2011